

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



May 6, 2009

DOCKET**08-AFC-5**

DATE MAY 06 2009

RECD. MAY 06 2009

Robert B. Liden,
Executive Vice President
SES Solar Two, LLC
2920 E. Camelback Road, Ste. 150
Phoenix, AZ 85016

**RE: STIRLING ENERGY SYSTEMS SOLAR TWO PROJECT (08-AFC-5) - DATA
REQUESTS SET 2, PART 1 (#s 128-141)**

Dear Mr. Liden:

Pursuant to Title 20, California Code of Regulations, Section 1716, the Bureau of Land Management (BLM) and California Energy Commission (Energy Commission) staff seek the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

Part 1 of this second set of data requests (#128-141) is being made in the areas of Air Quality (#128-131), Alternatives (#132-134), Land Use (#135-137), Noise and Vibration (#138-139), and Traffic and Transportation (#140-141). In order to publish the joint Preliminary Staff Assessment/Draft Environmental Impact Statement, written responses to the enclosed data requests are due to the BLM and Energy Commission staff on or before June 5, 2009. Staff will be filing Part 2 of this second set of data requests, focusing on Cultural Resources, by May 20th.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, you must send a written notice to both the Committee and me within 20 days of receipt of this notice. The notification must contain the reasons for not providing the information, the need for additional time, and the grounds for any objections (see Title 20, California Code of Regulations, Section 1716 (f)).

If you have any questions, please call me at (916) 653-1639 or email me at cmeyer@energy.state.ca.us.

Sincerely,

Christopher Meyer,
Project Manager

Enclosure

cc: Docket (08-AFC-5)
Proof of Service List

PROOF OF SERVICE (REVISED 4/14/09) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 5/6/09

MF

Technical Area: Air Quality
Author: William Walters

BACKGROUND: SOIL BINDER EMISSION CONTROL ASSUMPTION

While staff agrees with the general approach proposed by the applicant to stabilize the roads on the site, we are concerned that the emission control assumption for the polymeric soil binder overstates the effectiveness of such products. CARB has approved two soil binders, one of which is a polymeric compound and both are noted to provide at least 84 percent control. However, the difference between paved and unpaved emission factors would require control efficiencies much higher than 84 percent for equivalency. Staff needs additional information on the soil binder product and the specific proposed application methods that would create a surface equivalent to asphalt paving. Additionally, staff needs to know what the applicant would be willing to stipulate regarding the use and maintenance of the soil binder.

DATA REQUEST

128. Please describe the amount of soil binder that would be used (liters/square meter, or similar units), the thickness of the bound soil that would be equivalent to asphalt paving, and if possible provide a sample of the bound soil at the proposed thickness using surface soils from the project site.
129. Staff needs to determine appropriate maintenance procedures for the bound soil roads to ensure they maintain an asphalt paved quality surface. Please identify the ongoing measures necessary to maintain these bound soil roads and identify road maintenance procedures that the applicant would be willing to stipulate to in a condition of certification.

BACKGROUND: OPERATIONS – EQUIPMENT REFUELING EMISSIONS

Data Response 93 provides an emission estimate for the above ground gasoline tank based on 18,000 gallons per year of gasoline usage, while Data Response 103 notes on-site gasoline usage level of over 80,000 gallons. Staff needs explanation of this apparent discrepancy and correction of Data Response 93 as appropriate.

DATA REQUEST

130. Please identify why the gasoline fuel tank annual usage identified in Data Response 93 is less than 1/5th of the estimated on-site annual gasoline usage in Data Response 103 and Attachment AQ-2, and correct the annual gasoline usage given in Data Response 93, and associated calculations, as necessary to match the fuel use estimates shown in Data Response 103 and Attachment AQ-2.

BACKGROUND – CONSTRUCTION GREENHOUSE GAS EMISSIONS

Data Response 102 did not match the data request as only annual construction GHG emissions were provided while staff asked for GHG emissions for the entire construction period of 40 months.

DATA REQUEST

131. Please provide calculations for the project construction greenhouse gas emissions in CO₂-equivalent tons for the entire construction period, and include estimates of total fuel use by type of fuel during the entire construction period.

Technical Area: Alternatives
Author: Susan Lee

BACKGROUND

In Section 4.0 Alternatives, page 4-6, Section 4.2.2, Alternative Engineering Alternative – 300 MW Alternative, a 300 MW Alternative was considered which would consist of up to 12,000 SunCatchers occupying approximately 2,600 acres of land. The 300 MW Alternative as described would include ancillary features/infrastructure similar to those of the 750 MW Proposed Project including a water supply line, a transmission line, road access, operation facilities, and a substation. While the 300 MW Alternative Section describes general decreases in impacts to each resource area compared with the Proposed Project, it does not give any specific quantifiable details regarding the extent to which impacts would be decreased by a 300 MW Alternative.

DATA REQUEST

132. In order to facilitate preparation of the PSA/DEIS document and allow further analysis of this alternative, please provide the Biology and Cultural survey results for the 300 MW Alternative (Phase 1) separate from those of the complete Proposed Project.
133. Similarly, please provide the air emissions for the 300 MW Alternative (Phase 1) separate from those the Proposed Project and consistent with the information provided in recent Air Quality Data Requests.

BACKGROUND

In Section 4.0 Alternatives, page 4-25, Section 4.3.2, Alternatives Sites of the Application for Certification (AFC) three alternative sites are considered but are not carried forward for further analysis. Each alternative site was considered appropriate using the preliminary screening criteria and then found to have one or more fundamental flaws that removed the site from consideration (two sites are located within a Department of Defense “no-fly”, “no-build” zone and one site would require extensive off-site transmission).

In order to define alternative sites that would be potentially viable, staff has reviewed scoping comments and met with BLM staff and identified other potentially viable sites. GIS shapefiles for each site will be provided along with this data request. A map in PDF format is attached.

DATA REQUEST

134. Please provide the following information for each of the following three sites: the South of Hwy SR 98 Alternative site, the Mesquite Lake Alternative, and the Border Lands Alternative:

- **Biological Resources:** One of the site selection criteria for the proposed SES Solar Two site was to avoid highly pristine or biologically sensitive areas. In order to assess this criterion for the alternative sites, please provide the results of the CNDDDB search for the South of Hwy SR 98 site, the Mesquite Lake Alternative, and the Border Lands Alternative.
- **Cultural Resources:** Due to the extensive cultural resources present at the proposed SES Solar Two site, alternative sites are being sought that may impact fewer cultural sites while still achieving the required site criteria. Please provide an Information Center search (Class I) for recorded sites identified within the potential South of Hwy SR 98 site, the Mesquite Lake Alternative, and the Border Lands Alternative.

Technical Area: Land Use
Author: Negar Vahidi

INTRODUCTION

The Stirling Energy System (SES) Solar Two Project site is on public land that is administered by the BLM and private land under the jurisdiction of Imperial County. The amount of land to be fenced and developed within the BLM-administered public areas is estimated to be 6,140 acres. In addition to BLM-administered public lands, approximately 360 acres of private land will be permitted for the Project site (as stated on AFC page 5.9-4). The total fenced area to be developed will encompass approximately 6,140 acres of BLM-administered public and private lands comprising portions of 52 contiguous parcels.

BACKGROUND

As stated on page 5.9-4, Section 5.9.1.2 (Project Site and Vicinity) of the AFC, *“[t]he portions of the Project Site that are under county jurisdiction are designated as S-2 Recreation/Open Space. According to the LUO, electrical generation is an allowed use with a permit within zones designated as Agriculture Rural Land and Open Space (Imperial County 2008a). Per discussions on 15 March 2008 with Mr. Jim Minnick, Senior Planner, Imperial County, the Project would be subject to a Conditional Use Permit (CUP) if the Project were to be permitted by the County.”*

As noted above, the AFC states a portion of the Project is zoned as **Recreation/Open Space**. However, according to the Land Use Ordinance (LUO), the S-2 zone is Open Space/**Preservation** and electrical generation is not a permitted use, nor is it a permitted use with a CUP. Staff has contacted Imperial County Planning staff regarding this discrepancy and to verify the county’s position regarding project site zoning. County planning staff has indicated that they are aware of the issue and have contacted the applicant regarding the issue but has not received a specific response.

DATA REQUEST

135. Please verify with the county whether or not the proposed project is in compliance with the LUO and provide the county’s response with regard to their ability to issue a CUP (but for the Energy Commission’s authority).

BACKGROUND

Page 3-5 of the AFC, Section 3.2 (Location of the Project) states, *“[a]n off-site 6-inch-diameter water supply pipeline will be constructed a distance of approximately 3.40 miles from the Imperial Irrigation District (IID) Westside Main Canal to the Project boundary as shown on the Figure 3-4, Utility Plan – Off-Site Utility Service. The water supply pipeline will be defined by a linear survey and will be routed in the Union Pacific Railroad ROW, or adjacent to this ROW on federal and private lands...”* Staff needs specific information regarding the Project site in order to analyze potential agricultural land disturbance impacts. The following information is needed:

DATA REQUEST

136. Please verify whether construction of this pipeline would occur in the area proposed in AFC Figure 5.9-2.
137. If construction of the pipeline would occur within an Imperial County agricultural zone, please provide a LORS compliance analysis and the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (FMMP) land use designation for the area of impact.

Technical Area: Noise and Vibration
Author: Erin Bright

BACKGROUND

A grouping of five noise “receivers” located approximately 3,300 feet northwest of the project’s western boundary are identified on Figure 5.12-1 of the AFC. These receptors are not discussed in the description of the project site or the estimates of construction and operational noise effects on sensitive receptors, though their proximity to the site would potentially make them the nearest sensitive receptors.

DATA REQUEST

138. Please provide descriptions of the grouping of “receivers” located northwest of the western project boundary, including ambient noise values and distances from the project boundary and noise-producing project features.
139. Please provide an estimate of project construction noise and operating noise at these receptors.

Technical Area: Traffic and Transportation
Author: Steve Brown

BACKGROUND

Section 3.9.10 (Construction Traffic) page 3-59, Table 3-16 indicates that there would be 24 daily trips associated with construction personnel via buses, 70 daily trips associated with construction personnel via private vehicles, 173 daily trips associated with delivery trucks and 46 daily trips associated with heavy vehicles and trucks all pertaining to the construction period of the project.

However, statements made at the November 24, 2008 workshop in El Centro, indicated that there may be a change to the number of construction vehicles estimated at the site.

DATA REQUEST

140. Please provide a quantitative description of the change in the number construction vehicles to the site. Please breakdown by delivery trucks, employee trucks, buses that would transport employees onto the site, and heavy vehicles and trucks.

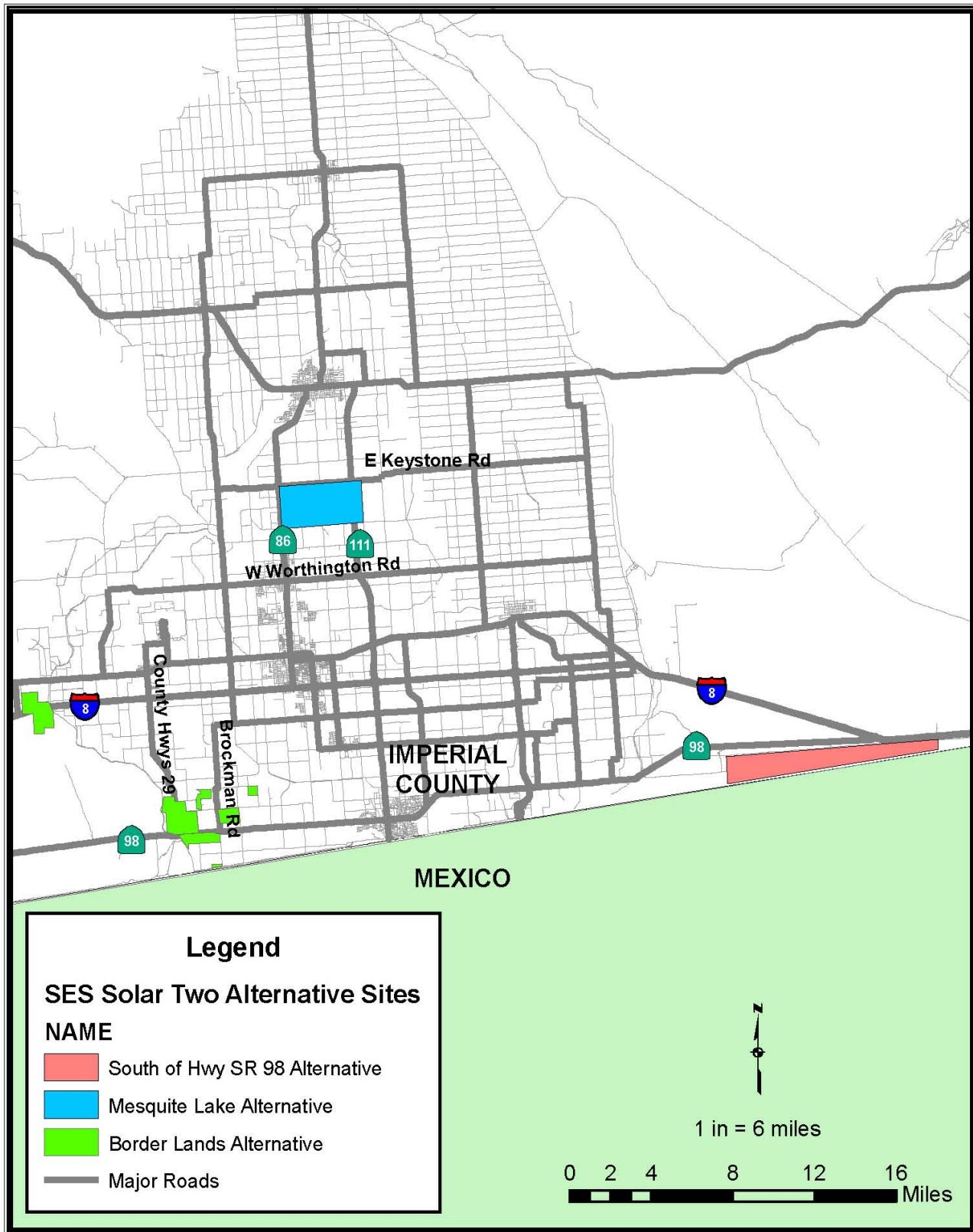
BACKGROUND

Section 3.9.8 (Heavy Equipment Delivery) page 3-55 indicates that heavy construction equipment will be moved to the Project Site by road. However during the November 24, 2008 workshop in El Centro, a comment was made that the heavy equipment for the project may be delivered via rail.

DATA REQUEST

141. Please provide confirmation on whether any deliveries will be made via rail and how many trucks will be taken off the roadway due to the change in mode of transportation.

DATA REQUEST- FIGURE 1
SES Solar Two - Alternative Sites



CALIFORNIA ENERGY COMMISSION - SITING, TRANSMISSION AND ENVIRONMENTAL PROTECTION DIVISION, MAY 2009
 SOURCE: California Energy Commission



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV**

**APPLICATION FOR CERTIFICATION
For the SES SOLAR TWO PROJECT**

Docket No. 08-AFC-5

PROOF OF SERVICE

(Revised 4/14/09)

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DECLARATION OF SERVICE

I, Mineka Foggie, declare that on May 6, 2009, I served and filed copies of the attached SES Solar Two Project- Data Requests Set 2, Part 1(#s 128-141), dated May 5, 2009. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: **[www.energy.ca.gov/sitingcases/solartwo]**. The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

 X sent electronically to all email addresses on the Proof of Service list;

 by personal delivery or by depositing in the United States mail at _____ with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

 X sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (***preferred method***);

OR

 depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. _____
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.

Original Signature in Dockets
Mineka Foggie